

DS-A830XXS-ICVS/PAK Series ICVS



Introduction

The DS-A830XXS-ICVS/PAK series ICVS is Hikvision high-end storage product. The controller architecture and no-cable design guarantee system stability. The hardware platform adopts PCI-E 3.0 bus and SAS 3.0 high-speed I/O channel technology to lay a solid foundation for the system performance. One cluster system supports 300 storage devices and totally capacity can be scalable up-to 300 PB. Support fully symmetric or asymmetric and fully distributed clustered architecture. The product makes use of ultra-fault-tolerant network RAID technology which is based on Eraser Code. It is not only provided with multi-HDD/multi-device fault-tolerant mechanism of the traditional network RAID, but also can continue data reading and writing service when the fault HDD/device number exceeds the redundant amounts. It provides data storage service with high reliability, high stability, and high performance, widely applicable to video security industry.

Features

Hardware Platform of New Generation

- PCI-E 3.0 bus.
- 12 Gb SAS 3.0 high-speed I/O channel.
- Brand new controller design.
- Redundant design for key components.

System Configuration of High Performance

- Modular and no-cable design.
- Single controller with two 4410T Xeon 10-core processors.
- 64 GB cache.
- 6 Gigabit network interfaces.

Ultra-Fault-Tolerant Network RAID

- N + M: K redundant mechanism, protection level which can protect data against simultaneous 2 disks failures or 4 storage device failure.
- When there are K fault devices, data will not lose, and the business will not be interrupted, it able to assign protection level on cluster.
- When the fault device number exceeds K, the business will not be interrupted.
- Support video lock for data protection.

SAS Exchange Architecture of High Availability

- When SAS is exchanging, if the controller software fails, it will not affect the HDD capacity of the current node and normal use of data.

Stream Data Management Structure of High Performance

- Based on the bottom layer management structure of the stream media, it can solve the problem that the damaged file system will lead to file unreadability or loss. The cyclic covering writing will not produce file fragments.
- When capacity expansion via the storage device, performance will be expand at the same time.
- The cluster system support load balance between nodes to avoid any performance hotspot.

Direct Storage of Mixed Stream

- Supports mixed storage of video stream and picture stream.
- Supports camera access through RTSP, ONVIF, PSIA protocol, etc.
- Supports remote backup, local backup.

User-Friendly Operation and Maintenance

- Centralized operation and maintenance, realizing centralized management of multi-devices.
- Supports changing disk/device in batch.
- Supports abundant alarm management methods, including alarm via indicators, mobile phone messages, emails, etc. to raise device maintenance efficiency.

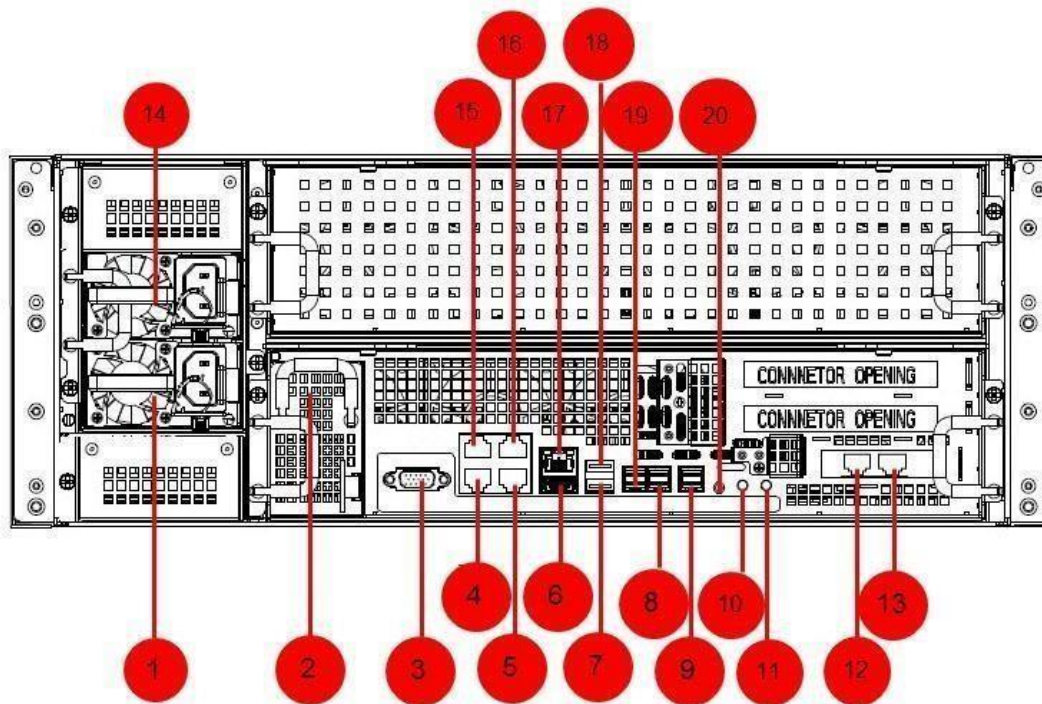


Specification

Model		DS-A83024S-ICVS	DS-A83048S-ICVS/PAK
Performance	Standard cluster (2 Mbps)	600-ch	
Controller	Processor	2 Xeon 4410T 10-cores 20 threads 2.7GHz	
	Cache	64 GB DDR4 standard, extendable to 384 GB	
HDD	HDD slot	24	48
	Interface	SSD/SAS/SATA	
	Capacity	1 TB/2 TB/3 TB/4 TB/6 TB/8 TB/10 TB/12 TB/14 TB/16TB (enterprise HDD)	
	Hot-swapping	Supported	
	RAID	Network RAID: N + M: K, N + M ≤ 16, M ≥ K, N ∈ [1, 15], M ∈ [1, 4], K ∈ [1, 4]	
Storage Management	System	CentOS	
	Disk management	Disk detection pre-alarm and repair	
	Cache protection	Supports customizing BBU in case of unexpected power failure to protect the cache data from being lost.	
Device Maintenance and Management	Management method	GUI based on web, serial port CLI, management based on platform	
	Alarm method	Audio, indicator, GUI	
Interfaces	Data network interface	6, 1000M Ethernet interface (8 × GbE or 4 × 10GbE is extendable)	
	Management network interface	1, 1000M Ethernet interface	
	SAS extension interface	3, 12 Gbps SAS 3.0	
	COM	2: 1 for RS-232, 1 for RS-485	
	USB	3 (2 × USB 3.0, 1 × USB 2.0)	
General	Power supply (rated)	Redundant 1 + 1, ≤ 550 W	Redundant 2 + 1, ≤ 1600 W
	Consumption (with HDDs)	≤ 484 W	≤ 763 W
	Environment temperature	<ul style="list-style-type: none"> ● Working: +5 °C to +40 °C (+41 °F to +104 °F) ● Storing: -20 °C to +70 °C (-4 °F to +158 °F) 	
	Environment humidity	<ul style="list-style-type: none"> ● Working: 20% to 80%RH (non-condensing/frozen) ● Storing: 5% to 90%RH (non-condensing/frozen) 	
	Dimension (W × H × D)	484 x 174 x 760 mm (19.1 x 6.9 x 29.9 inch)	487 x 345 x 751 mm (19.2 x 13.6 x 29.6 inch)
Weight (without HDDs)	≤ 43 kg (94.8 lb)	≤ 93 kg (205 lb)	

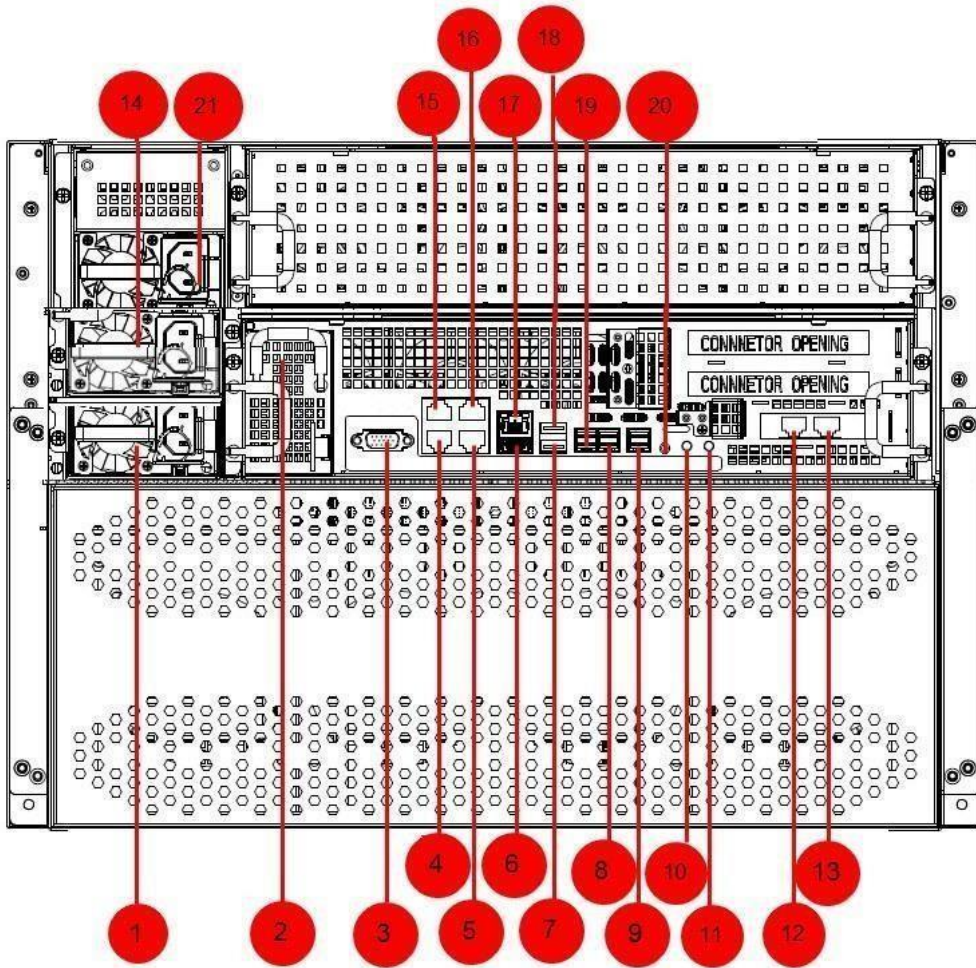
Physical Interface

DS-A83024S-ICVS/PAK



No.	Name	No.	Name
1	Power module 1	11	Power switch
2	BBU (optional)	12	LAN 5
3	RS-232 interface	13	LAN 6
4	LAN 1	14	Power module 2
5	LAN 2	15	LAN 3
6	USB interface 1	16	LAN 4
7	USB interface 2	17	Management LAN
8	SAS interface 2	18	USB interface 3
9	SAS interface 3	19	SAS interface 1
10	FN button	20	COM

DS-A83048S-ICVS/PAK



No.	Name	No.	Name
1	Power module 1	12	LAN 5
2	BBU (optional)	13	LAN 6
3	RS-232 interface	14	Power module 2
4	LAN 1	15	LAN 3
5	LAN 2	16	LAN 4
6	USB interface 1	17	Management LAN
7	USB interface 2	18	USB interface 3
8	SAS interface 2	19	SAS interface 1
9	SAS interface 3	20	COM
10	FN button	21	Power module 3
11	Power switch		

Distributed by

**HIKVISION®****Headquarters**

No.555 Qianmo Road, Binjiang District,
Hangzhou 310051, China
T +86-571-8807-5998
overseasbusiness@hikvision.com

Hikvision USA
T +1-909-895-0400
sales.usa@hikvision.com

Hikvision Australia
T +61-2-8599-4233
salesau@hikvision.com

Hikvision India
T +91-22-28469900
sales@pramahikvision.com

Hikvision Canada
T +1-866-200-6690
sales.canada@hikvision.com

Hikvision Thailand
T +662-275-9949
sales.thailand@hikvision.com

Hikvision Europe
T +31-23-5542770
sales.eu@hikvision.com

Hikvision Italy
T +39-0438-6902
info.it@hikvision.com

Hikvision Brazil
T +55 11 3318-0050
Latam.support@hikvision.com

Hikvision Turkey
T +90 (216)521 7070- 7074
sales.tr@hikvision.com

Hikvision Malaysia
T +601-7652-2413
sales.my@hikvision.com

Hikvision UK & Ireland
T +01628-902140
sales.uk@hikvision.com

Hikvision South Africa
Tel: +27 (10) 0351172
sale.africa@hikvision.com

Hikvision France
T +33(0)1-85-330-450
info.fr@hikvision.com

Hikvision Kazakhstan
T +7-727-9730667
nikia.panfilov@hikvision.ru

Hikvision Vietnam
T +84-974270888
sales.vt@hikvision.com

Hikvision UAE
T +971-4-4432090
salesme@hikvision.com

Hikvision Singapore
T +65-6684-4718
sg@hikvision.com

Hikvision Spain
T +34-91-737-16-55
info.es@hikvision.com

Hikvision Tashkent
T +99-87-1238-9438
uzb@hikvision.ru

Hikvision Hong Kong
T +852-2151-1761
info.hk@hikvision.com

Hikvision Russia
T +7-495-669-67-99
saleru@hikvision.com

Hikvision Korea
T +82-(0)31-731-8817
sales.korea@hikvision.com

Hikvision Poland
T +48-22-460-01-50
info.pl@hikvision.com

Hikvision Indonesia
T +62-21-2933759
Sales.Indonesia@hikvision.com

Hikvision Colombia
sales.colombia@hikvision.com